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ABSTRACT

In 1981, the Faculty Senate, at an upper division midwestern university, initiated the consideration of a literate skills testing program to address variance in academic level of the entering undergraduate student. The policy stipulated that all undergraduate students admitted to a degree program must demonstrate competency in writing and computation before they are permitted to register for more than a cumulative total of 20 credit hours. A program using available national examinations to validate the literate skills of entering business students was modified to include the entire undergraduate population. Students not meeting the minimum competencies in the first trimester of enrollment are required to pass equivalent courses. Two areas are tested: writing and mathematics. The Test of Standard Written English (TSWE) is used, with the national median of the TSWE serving as the competency criterion. Elementary Algebra and Intermediate Algebra of the Descriptive Test of Mathematics Skills (DTMS) are also used. In addition to the TSWE and DTMS, students not meeting the university standards may undergo additional psychometric evaluations on a voluntary basis using the Arithmetic Skills Tests of the DTMS and Reading Comprehension, Usage and Sentence Structure Tests of the Descriptive Tests of Language Skills. (Author/PN)

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Abstract

DEVELOPMENT OF A LITERATE SKILLS TESTING PROGRAM FOR OLDER ADULT RE-ENTRY UNDERGRADUATE STUDENTS

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There is limited research regarding testing programs designed to validate the literate skills of undergraduate students as they progress through the curriculum. Furthermore, the instruments used for this purpose are either locally developed or nationally standardized examinations. Only one program using available national examinations has been documented in the literature, but that program was for students in business curricula. This program with modifications was expanded to the entire undergraduate population and is scheduled to be implemented in September of 1983. One major addendum was a voluntary adjunct testing component designed to assist students in meeting the literate skills competencies.

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DEVELOPMENT OF A LITERATE SKILLS TESTING PROGRAM FOR OLDER ADULT RE-ENTRY UNDERGRADUATE STUDENTS

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At an upper division midwestern university, the entering undergraduates have a mean age of approximately 30 years; thus, these juniors and seniors generally have been absent from the formal academic setting a decade. While the institution's undergraduate admission's criteria is primarily based upon prior transcript evaluation, the past course work is generally an abated indication of re-entry level skills.

In 1981, the Faculty Senate initiated the consideration of a literate skills testing program to address variance in academic level of the entering undergraduate student. The policy development process had the necessary requisite for success; that is, the need recognized by the faculty and administration (Pounds, 1980). However, other projected dynamics were also present; specifically, conflicting philosophies and desires (Pounds, 1980) interplaying with pedagogical factors as well as unique institutional considerations (Willingham, 1974). After several revisions, the policy was adopted in early 1983 with the implementation date scheduled for September of 1983.

Policy

The testing policy stipulated that all undergraduate students admitted to a degree program must demonstrate competency in writing and computation before they are permitted to register for more than a cumulative total of 20 credit hours. These competencies could be achieved by challenging a set of university approved examinations a maximum of two times and/or by passing the equivalent courses with a minimum grade of C. It should be noted

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that students were encouraged to challenge the examinations during their first trimester of enrollment. The policy also called for a university examinations committee, having, among other duties, the responsibility to select the examinations and to establish minimum competency standards.

Review of the Literature

The problem of articulation, that is, the transferring of students from one institution to another, in particular, the testing of transfer students, has not been the focus of research (Willingham, 1974). One of the oldest and most widely known programs addressing the problem is the Regents' Testing Program of the University System of Georgia (Pounds, 1980; Rentz, 1980; and Ridenour, 1980), but this program currently uses locally developed instruments.

The only known published research addressing testing of basic skills of transferring juniors and seniors with nationally recognized examinations was for one college at the upper division university which passed the literate skills policy. Entering degree-seeking students in the College of Business and Public Administration participate in a testing program during their first trimester of enrollment. Students not meeting the minimum competencies at the first administration are required to pass equivalent courses. Two areas are tested; these are writing and mathematics.

For writing, the Test of Standard Written English (Educational Testing Service, 1974-1978) is used with the national median of the TSWE serving as the competency criterion. Student academic success; i.e., completion rates when the institution used a pass-no credit grading option and grade point average after the 4.0 grading option was adopted, varied significantly by initial test results and subsequent equivalent course status if required.

The trends were as follows: highest for students passing the TSWE, lower for students passing the additional course, and lowest for students yet to satisfy the writing skills requirement (Suddick, 1981 and 1982).

For mathematics, two tests, Elementary Algebra and Intermediate Algebra of the Descriptive Test of Mathematics Skills (Educational Testing Service, 1979) are used. Students not scoring at least the national median on both tests are required to enroll in an algebra course. Passing the lower level mathematics course or passing the examination is the prerequisite for enrollment in calculus and statistics. Students who passed the DTMS, in comparison to those who passed the algebra course, earned higher grades in the advanced mathematics courses. However, both groups of students tended to be successful in calculus and statistics courses (Suddick and Collins, 1982).

Committee Deliberation

Per the criterion of validity, the TSWE and one DTMS instrument, Elementary Algebra, were chosen and the level of competency was set at the norming population median score. It should be noted that the TSWE is normed with graduating high school seniors who are seeking admission to institutions of higher education through the Scholastic Aptitude Test of the College Entrance Examination Board. The DTMS is normed in a population of undergraduate students.

Further Diagnosis

The responsibility for test interpretation was delegated to the Office of Student Development; that is, the Associate Dean, the testing staff and the counseling staff. In addition to interpreting the results of the TSWE and DTMS, students not meeting the university standards are to be accorded the opportunity to undergo additional psychometric evaluations on

a voluntary basis. These instruments were chosen to provide the students with further information; in particular, did they have the prerequisites for challenging the university testing program, and what was the potential rationale for not meeting the university testing standards? The instruments were the Arithmetic Skills Tests of the Descriptive Tests of Mathematics Skills (Educational Testing Service, 1978) and Reading Comprehension, Usage and Sentence Structure Tests of the Descriptive Tests of Language Skills (Educational Testing Service, 1978).

For students who do not meet the writing standard per the median score on the TSWE, these students will be given the opportunity to take the following examinations which have the following subscales:

1. DTLS Reading Comprehension with part scores of:
   a. understanding main ideas
   b. understanding main statement
   c. drawing inference
2. DTLS Usage with part scores of:
   a. using pronouns
   b. using modifiers
   c. using verbs
   d. using diction and idiom
3. DTLS Sentence Structure with part scores of:
   a. using complete sentences
   b. coordinates and subordinates
   c. placing modifiers

For students who do not meet the university standard for mathematics, they will be given the opportunity to be tested on the Arithmetic Skills

Tests of the DTMS. The subscales of this instrument are:

a. operations with whole numbers

b. operations with fractions

c. operations with decimals and percents

d. applications involving computations (word problems)

Summary

Minimum basic skills testing is a new, most important, highly controversial and least examined issue that has recently emerged (Jaeger and Tittle, 1980). While most minimum competency testing programs have been implemented at primary and secondary school levels, there is extreme variance in these programs with respect to models, measures, and consequences for not meeting competencies (Shoemaker, 1980). As such programs evolve in higher education, these programs could be expected to vary as a function of pedagogical tenets (Pounds, 1980 and Willingham, 1974) as well as local unique considerations (Willingham, 1974).

The University System of Georgia Regents' Testing Program has evolved based upon systematic analysis (Ridenour, 1980). It would be expected that the Literate Skills Testing Program at the upper-division university referred to in this manuscript will also undergo refinement based upon empirical inquiry.

The University System of Georgia Regents' Testing Program as well as the College of Business and Public Administration testing program suggest that basic skills assessment at the non-entering freshman level can be used to identify and to correct student weaknesses. It will be most interesting to follow the continued development and evaluation of other such testing programs. Only then can more definitive trends be gleaned in the higher education setting.

REFERENCES

Educational Testing Service. Descriptive Tests of Language Skills. Princeton, NJ: Author, 1978.

Educational Testing Service. Descriptive Tests of Mathematics Skills. Princeton, NJ: Author, 1979.

Educational Testing Service. Test of Standard Written English. Princeton, NJ: Author, 1974-1978.

Jaeger, R.M. and Tittle, C.K. (Ed.) Minimum Competency Achievement Testing: Motives, models, measures and consequences. Berkley, CA: McCutchan Publishing Corporation, 1980.

Pounds, H.R. Development and implementation of policies for assessing basic skills in higher education. In R.M. Jaeger and C.K. Tittle (Ed.), Minimum Competency Achievement Testing: Motives, models, measures and consequences. Berkley, CA: McCutchan Publishing Corporation, 1980. Pp. 324-330.

Rentz, R.R. Characteristics of tests used in a minimum competency testing program in higher education. In R.M. Jaeger and C.K. Tittle (Ed.), Minimum competency achievement testing: Motives, models, measures and consequences. Berkley, CA: McCutchan Publishing Corporation, 1980. Pp. 338-344.

Ridenour, S.E. Impacts of proficiency testing on higher education. In R.M. Jaeger and C.K. Tittle (Ed.), Minimum competency achievement testing: Motives, models, measures and consequences. Berkley, CA: McCutchan Publishing Corporation, 1980. Pp. 331-337.

Shoemaker, J.S. Minimum competency testing: The view from Capitol Hill. In R.M. Jaeger and C.K. Tittle (Ed.), Minimum competency achievement testing: Motives, models, measures and consequences. Berkley, CA: McCutchan Publishing Corporation, 1980, Pp. 310-323.

Suddick, D.E. A re-examination of the use of the Test of Standard Written English and resulting placement for older upper-division and master's level students. Educational and Psychological Measurement, 1982, 42, 367-369.

Suddick, D.E. The Test of Standard Written English and resulting placement patterns: A follow-up of performance of older upper-division and master's level students. Educational and Psychological Measurement, 1981, 41, 599-601.

Suddick, D.E. and Collins, B.A. The Descriptive Tests of Mathematics Skills: A follow-up of performance of older upper-division students. Educational and Psychological Measurement, 1982, 42, 599-601.

Willingham, W.W. College placement and exemption. New York, NY: College Entrance Examination Board, 1974.